

STARFLEX ALS (ABN) – Datasheet

Specifications

Model	Torque		Misalignment			Max. rotation speed [min ⁻¹]	Static torsional stiffness [N-m/rad]	Radial stiffness [N/mm]	Moment of inertia [kg-m ²]	Mass [kg]
	Nominal [N-m]	Max. [N-m]	Parallel [mm]	Angular [°]	Axial [mm]					
ALS-030B	(12.5)	(25)	0.17	1	-0.2 ~ +1.0	10000	90	460	6.07×10^{-6}	0.043
ALS-040B	(17)	(34)	0.20	1	-0.5 ~ +1.2	10000	400	640	4.00×10^{-5}	0.16
ALS-055B	(60)	(120)	0.22	1	-0.2 ~ +1.4	7000	1150	400	1.63×10^{-4}	0.34
ALS-065B	(160)	(320)	0.25	1	-0.6 ~ +1.5	5900	2000	800	3.69×10^{-4}	0.54
ALS-080B	(325)	(650)	0.28	1	-0.9 ~ +1.8	4800	4550	600	1.04×10^{-3}	1.00
ALS-095B	(450)	(900)	0.32	1	-0.5 ~ +2.0	4000	12000	800	2.25×10^{-3}	1.50
ALS-105B	(525)	(1050)	0.36	1	-0.9 ~ +2.0	3700	15000	2000	3.75×10^{-3}	2.05

• Check the Standard Bore Diameter and Rated Transmission Torque list as there may be limitations on the nominal and max. torque caused by the holding power of the coupling shaft section.

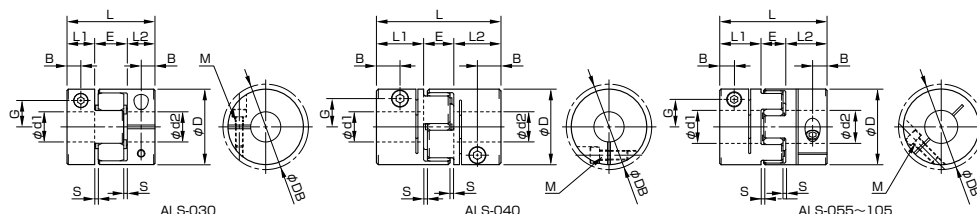
• Axial displacement is not allowed in the negative direction.

• Higher rpm possible with balancing.

• Stiffness values given are from measurements taken at 20 °C.

• The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Model	d1 • d2		D	DB	L	L1 • L2	E	S	B	G	M Quantity – Nominal dia.	Unit [mm] Tightening torque [N-m]
	Min.	Max.										
ALS-030B	6	16	30	30	35	11	13	1.5	5.5	10.5	1-M3	1.5
ALS-040B	8	24	40	47 (45.1)	66	25	16	2	8 (6.5)	15	1-M6 (1-M5)	14 (7)
ALS-055B	10	30	55	56	78	30	18	2	8	20.5	1-M6	14
ALS-065B	14	38	65	70.7	90	35	20	2.5	11.5	25	1-M8	30
ALS-080B	19	45	80	80	114	45	24	3	11.5	30	1-M8	30
ALS-095B	20	55	95	98.5	126	50	26	3	12.5	37	1-M10	68
ALS-105B	25	60	105	105	140	56	28	3.5	12.5	40	1-M10	68

• The ØDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.

• The nominal diameter for the clamping bolt M is equal to the quantity – the nominal diameter of the screw threads, where the quantity is for a hub on one side.

• The values in () in the above table are for ALS-040 hole diameters Ø22 and Ø24, ØDB: 45.1 mm, B: 6.5 mm, M: 1-M5, clamping bolt tightening torque: 7 N-m.

Standard bore diameter and rated transmission torque

Unit [mm]																																		
Model	Torque	Standard bore diameter d1, d2 [mm] and rated transmission torque [N·m]																																
		3	4	5	6	6.35	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	56	60	
ALS-030B	Nominal				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																				
	Max.				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																				
ALS-040B	Nominal							17	17	17	17	17	17	17	17	17	17	17																
	Max.							22	27	29	31	34	34	34	34	34	34	30	32															
ALS-055B	Nominal								34	38	41	49	53	57	60	60	60	60	60	60	60	60												
	Max.								34	38	41	49	53	57	65	69	72	80	88	92	104	111												
ALS-065B	Nominal											54	61	68	82	89	96	109	123	130	151	160	160	160	160									
	Max.											54	61	68	82	89	96	109	123	130	151	165	179	199	220									
ALS-080B	Nominal															105	111	124	137	143	162	175	188	207	226	238	251	270						
	Max.															105	111	124	137	143	162	175	188	207	226	238	251	270						
ALS-095B	Nominal																	215	295	365	400	450	450	450	450	450	450	450	450	450	450	450		
	Max.																	215	295	365	400	506	575	646	716	786	856	900	900	900	900	900	900	
ALS-105B	Nominal																			525	525	525	525	525	525	525	525	525	525	525	525	525	525	
	Max.																			590	630	660	689	733	800	870	950	1050	1050	1050	1050	1050	1050	

- Bore diameters whose fields contain numbers are supported as the standard bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated transmission torque by the holding power of the shaft connection component. The numbers indicate the rated transmission torque value [N·m].
- The recommended processing tolerance for paired mounting shafts is the h7 (HA) class. However, for a shaft diameter of ø35, the tolerance is $\begin{smallmatrix} +0.010 \\ -0.005 \end{smallmatrix}$.
- Bore diameters between the minimum and maximums shown in the dimensions table are compatible, but bore diameters other than those shown in the above table require other arrangements. Contact Miki Pulley for details.

How to Place an Order

ALS-055-B-24BH-28BJ

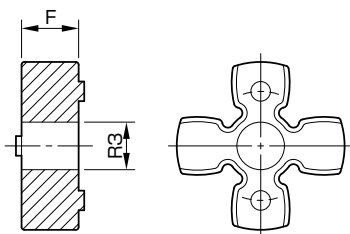
Size ———— Bore dia. d2 (Large dia.)
 Element type ———— B: h7
 B: Hardness, 97 JIS A
 Loose-fit type ———— BJ: h7, Class Js9 with keyway
 Bore dia. d1 (Small dia.)
 B: h7
 BH: h7, Class H9 with keyway
 BJ: h7, Class Js9 with keyway

Keyway Standards

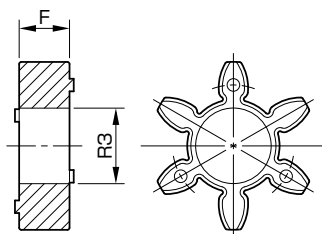
H9 keyway										JS9 keyway									
Nominal bore dia.	Bore dia.	Keyway width	Keyway height	Nominal bore dia.	Bore dia.	Keyway width	Keyway height	Nominal bore dia.	Bore dia.	Keyway width	Keyway height	Nominal bore dia.	Bore dia.	Keyway width	Keyway height	Nominal bore dia.	Bore dia.	Keyway width	Keyway height
Shaft diameter	Shaft tolerance	d1 · d2 [mm]	W1 · W2 [mm]	T1 · T2 [mm]	Shaft diameter	Shaft tolerance	d1 · d2 [mm]	W1 · W2 [mm]	T1 · T2 [mm]	Shaft diameter	Shaft tolerance	d1 · d2 [mm]	W1 · W2 [mm]	T1 · T2 [mm]	Shaft diameter	Shaft tolerance	d1 · d2 [mm]	W1 · W2 [mm]	T1 · T2 [mm]
h7	h7				h7	h7				h7	h7				h7	h7			
8	BH	8	2 $\begin{smallmatrix} +0.025 \\ 0 \end{smallmatrix}$	9 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	20	BH	20	6 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	22.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	8	BJ	8	2 ± 0.0125	9 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	20	BJ	20	6 ± 0.0150	22.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
9	BH	9	3 $\begin{smallmatrix} +0.025 \\ 0 \end{smallmatrix}$	10.4 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	22	BH	22	6 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	24.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	9	BJ	9	3 ± 0.0125	10.4 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	22	BJ	22	6 ± 0.0150	24.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
10	BH	10	3 $\begin{smallmatrix} +0.025 \\ 0 \end{smallmatrix}$	11.4 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	24	BH	24	8 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	27.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	10	BJ	10	3 ± 0.0125	11.4 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	24	BJ	24	8 ± 0.0180	27.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
11	BH	11	4 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	12.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	25	BH	25	8 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	28.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	11	BJ	11	4 ± 0.0150	12.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	25	BJ	25	8 ± 0.0180	28.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
12	BH	12	4 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	13.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	28	BH	28	8 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	31.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	12	BJ	12	4 ± 0.0150	13.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	28	BJ	28	8 ± 0.0180	31.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
13	BH	13	5 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	15.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	30	BH	30	8 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	33.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	13	BJ	13	5 ± 0.0150	15.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	30	BJ	30	8 ± 0.0180	33.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
14	BH	14	5 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	16.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	32	BH	32	10 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	35.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	14	BJ	14	5 ± 0.0150	16.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	32	BJ	32	10 ± 0.0180	35.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
15	BH	15	5 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	17.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	35	BH	35	10 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	38.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	15	BJ	15	5 ± 0.0150	17.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	35	BJ	35	10 ± 0.0180	38.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
16	BH	16	5 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	18.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	38	BH	38	10 $\begin{smallmatrix} +0.036 \\ 0 \end{smallmatrix}$	41.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	16	BJ	16	5 ± 0.0150	18.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	38	BJ	38	10 ± 0.0180	41.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
17	BH	17	5 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	19.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	40	BH	40	12 $\begin{smallmatrix} +0.043 \\ 0 \end{smallmatrix}$	43.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	17	BJ	17	5 ± 0.0150	19.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	40	BJ	40	12 ± 0.0215	43.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
18	BH	18	6 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	20.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	42	BH	42	12 $\begin{smallmatrix} +0.043 \\ 0 \end{smallmatrix}$	45.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	18	BJ	18	6 ± 0.0150	20.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	42	BJ	42	12 ± 0.0215	45.3 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$
19	BH	19	6 $\begin{smallmatrix} +0.030 \\ 0 \end{smallmatrix}$	21.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	45	BH	45	14 $\begin{smallmatrix} +0.043 \\ 0 \end{smallmatrix}$	48.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	19	BJ	19	6 ± 0.0150	21.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	45	BJ	45	14 ± 0.0215	48.8 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$

• We can also handle standards not listed above. Please contact Miki Pulley.

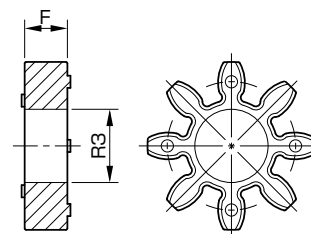
■ Dimensions Spider



ALS-030-B-EL



ALS-040-B-EL



ALS-055 ~ 105-B-EL

Model	F (mm)	R3 (mm)
ALS-030-B-EL	10.2	10.5
ALS-040-B-EL	12	18.5
ALS-055-B-EL	14	27.5
ALS-065-B-EL	15	32
ALS-080-B-EL	18	41
ALS-095-B-EL	20	47
ALS-105-B-EL	21	50

How to Place an Order

ALS-055-Y-EL

Size ——— Element only
 ——— Element type
 Y: Hardness 90 JIS A; Tight-fit type
 Material: Polyurethane elastomer

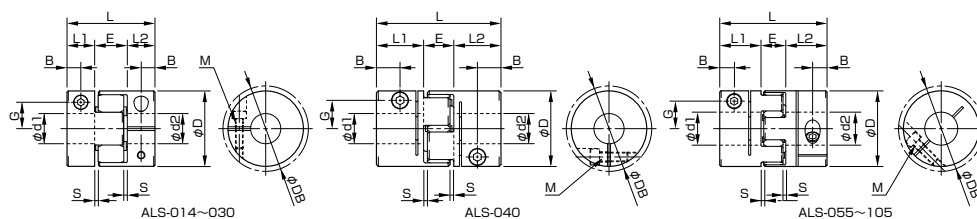
STARFLEX ALS (ARN) – Datasheet

Specifications

Model	Torque		Misalignment			Max. rotation speed [min ⁻¹]	Static torsional stiffness [N-m/rad]	Radial stiffness [N/mm]	Moment of inertia [kg-m ²]	Mass [kg]
	Nominal [N-m]	Max. [N-m]	Parallel [mm]	Angular [°]	Axial [mm]					
ALS-014R	(2)	(4)	0.10	1	0 ~ +0.6	10000	21	380	1.98×10^{-7}	0.007
ALS-020R	(5)	(10)	0.10	1	0 ~ +0.8	10000	43	400	1.09×10^{-6}	0.019
ALS-030R	(12.5)	(25)	0.10	1	0 ~ +1.0	10000	136	650	6.19×10^{-6}	0.045
ALS-040R	(17)	(34)	0.10	1	0 ~ +1.2	10000	1550	1700	4.01×10^{-5}	0.16
ALS-055R	(60)	(120)	0.10	1	0 ~ +1.4	7000	2000	1350	1.63×10^{-4}	0.34
ALS-065R	(160)	(320)	0.10	1	0 ~ +1.5	5900	3100	1400	3.69×10^{-4}	0.54
ALS-080R	(325)	(650)	0.10	1	0 ~ +1.8	4800	6000	1710	1.04×10^{-3}	1.00
ALS-095R	(450)	(900)	0.10	1	-0.5 ~ +2.0	4000	10000	4200	2.25×10^{-3}	1.50
ALS-105R	(525)	(1050)	0.15	1	-0.9 ~ +2.0	3700	12000	5000	3.75×10^{-3}	2.05

- Check the Standard Bore Diameter and Rated Transmission Torque list as there may be limitations on the nominal and max. torque caused by the holding power of the coupling shaft section.
- Axial displacement is not allowed in the negative direction.
- Higher rpm possible with balancing.
- Stiffness values given are from measurements taken at 20 °C.
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Model	d1 • d2		D	DB	L	L1 • L2	E	S	B	G	M Quantity – Nominal dia.	Tightening torque [N-m]
	Min.	Max.										
ALS-014R	3	7	14	16.4	22	7	8	1	3.5	5	1-M2	0.4
ALS-020R	4	10	20	21.7	30	10	10	1	5.	7.5	1-M2.5	1
ALS-030R	6	16	30	30	35	11	13	1.5	5.5	10.5	1-M3	1.5
ALS-040R	8	24	40	47 (45.1)	66	25	16	2	8 (6.5)	15	1-M6 (1-M5)	14 (7)
ALS-055R	10	30	55	56	78	30	18	2	8	20.5	1-M6	14
ALS-065R	14	38	65	70.7	90	35	20	2.5	11.5	25	1-M8	30
ALS-080R	19	45	80	80	114	45	24	3	11.5	30	1-M8	30
ALS-095R	20	55	95	98.5	126	50	26	3	12.5	37	1-M10	68
ALS-105R	25	60	105	105	140	56	28	3.5	12.5	40	1-M10	68

- The ϕDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
- The nominal diameter for the clamping bolt M is equal to the quantity – the nominal diameter of the screw threads, where the quantity is for a hub on one side.
- The values in () in the above table are for ALS-040 hole diameters $\phi 22$ and $\phi 24$, ϕDB : 45.1 mm, B: 6.5 mm, M: 1-M5, clamping bolt tightening torque: 7 N-m.

Standard bore diameter and rated transmission torque

Unit [mm]																																			
Model	Torque	Standard bore diameter d1, d2 [mm] and rated transmission torque [N·m]																																	
		3	4	5	6	6.35	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	56	60		
ALS-014R	Nominal	0.5	0.9	1.3	1.5	1.7	1.9																												
	Max.	0.5	0.9	1.3	1.5	1.7	1.9																												
ALS-020R	Nominal		2.1	2.2	2.7	2.7	3.0	3.5	4.5																										
	Max.		2.1	2.2	2.7	2.7	3.0	3.5	4.5																										
ALS-030R	Nominal				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																					
	Max.				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																					
ALS-040R	Nominal							17	17	17	17	17	17	17	17	17	17	17	17	17															
	Max.							22	27	29	31	34	34	34	34	34	34	34	30	32															
ALS-055R	Nominal									34	38	41	49	53	57	60	60	60	60	60	60	60	60												
	Max.									34	38	41	49	53	57	65	69	72	80	88	92	104	111												
ALS-065R	Nominal														54	61	68	82	89	96	109	123	130	151	160	160	160	160							
	Max.														54	61	68	82	89	96	109	123	130	151	165	179	199	220							
ALS-080R	Nominal																	105	111	124	137	143	162	175	188	207	226	238	251	270					
	Max.																	105	111	124	137	143	162	175	188	207	226	238	251	270					
ALS-095R	Nominal																			215	295	365	400	450	450	450	450	450	450	450	450	450	450		
	Max.																			215	295	365	400	506	575	646	716	786	856	900	900	900	900		
ALS-105R	Nominal																					525	525	525	525	525	525	525	525	525	525	525	525	525	
	Max.																					590	630	660	689	733	800	870	950	1050	1050	1050	1050	1050	

- Bore diameters whose fields contain numbers are supported as the standard bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated transmission torque by the holding power of the shaft connection component. The numbers indicate the rated transmission torque value [N·m].
- The recommended processing tolerance for paired mounting shafts is the h7 (HA) class. However, for a shaft diameter of ø35, the tolerance is ± 0.010 .
- Bore diameters between the minimum and maximums shown in the dimensions table are compatible, but bore diameters other than those shown in the above table require other arrangements. Contact Miki Pulley for details.

How to Place an Order

ALS-055-R-24BH-28BJ

Size ————
 Element type ————
 R: Hardness, 97 JIS A
 Tight-fit type

Bore dia. d2 (Large dia.)
 B: h7
 BH: h7, Class H9 with keyway
 BJ: h7, Class Js9 with keyway

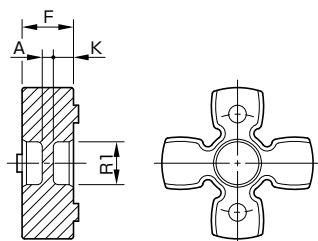
Bore dia. d1 (Small dia.)
 B: h7
 BH: h7, Class H9 with keyway
 BJ: h7, Class Js9 with keyway

Keyway Standards

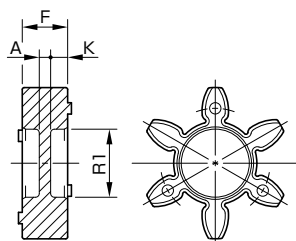
H9 keyway										JS9 keyway									
Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]
Shaft diameter	Shaft tolerance				Shaft diameter	Shaft tolerance				Shaft diameter	Shaft tolerance								
	h7					h7					h7					h7			
8	BH	8	2 ^{+0.025} ₀	9 ^{+0.3} ₀	20	BH	20	6 ^{+0.030} ₀	22.8 ^{+0.3} ₀	8	BJ	8	2 ± 0.0125	9 ^{+0.3} ₀	20	BJ	20	6 ± 0.0150	22.8 ^{+0.3} ₀
9	BH	9	3 ^{+0.025} ₀	10.4 ^{+0.3} ₀	22	BH	22	6 ^{+0.030} ₀	24.8 ^{+0.3} ₀	9	BJ	9	3 ± 0.0125	10.4 ^{+0.3} ₀	22	BJ	22	6 ± 0.0150	24.8 ^{+0.3} ₀
10	BH	10	3 ^{+0.025} ₀	11.4 ^{+0.3} ₀	24	BH	24	8 ^{+0.036} ₀	27.3 ^{+0.3} ₀	10	BJ	10	3 ± 0.0125	11.4 ^{+0.3} ₀	24	BJ	24	8 ± 0.0180	27.3 ^{+0.3} ₀
11	BH	11	4 ^{+0.030} ₀	12.8 ^{+0.3} ₀	25	BH	25	8 ^{+0.036} ₀	28.3 ^{+0.3} ₀	11	BJ	11	4 ± 0.0150	12.8 ^{+0.3} ₀	25	BJ	25	8 ± 0.0180	28.3 ^{+0.3} ₀
12	BH	12	4 ^{+0.030} ₀	13.8 ^{+0.3} ₀	28	BH	28	8 ^{+0.036} ₀	31.3 ^{+0.3} ₀	12	BJ	12	4 ± 0.0150	13.8 ^{+0.3} ₀	28	BJ	28	8 ± 0.0180	31.3 ^{+0.3} ₀
13	BH	13	5 ^{+0.030} ₀	15.3 ^{+0.3} ₀	30	BH	30	8 ^{+0.036} ₀	33.3 ^{+0.3} ₀	13	BJ	13	5 ± 0.0150	15.3 ^{+0.3} ₀	30	BJ	30	8 ± 0.0180	33.3 ^{+0.3} ₀
14	BH	14	5 ^{+0.030} ₀	16.3 ^{+0.3} ₀	32	BH	32	10 ^{+0.036} ₀	35.3 ^{+0.3} ₀	14	BJ	14	5 ± 0.0150	16.3 ^{+0.3} ₀	32	BJ	32	10 ± 0.0180	35.3 ^{+0.3} ₀
15	BH	15	5 ^{+0.030} ₀	17.3 ^{+0.3} ₀	35	BH	35	10 ^{+0.036} ₀	38.3 ^{+0.3} ₀	15	BJ	15	5 ± 0.0150	17.3 ^{+0.3} ₀	35	BJ	35	10 ± 0.0180	38.3 ^{+0.3} ₀
16	BH	16	5 ^{+0.030} ₀	18.3 ^{+0.3} ₀	38	BH	38	10 ^{+0.036} ₀	41.3 ^{+0.3} ₀	16	BJ	16	5 ± 0.0150	18.3 ^{+0.3} ₀	38	BJ	38	10 ± 0.0180	41.3 ^{+0.3} ₀
17	BH	17	5 ^{+0.030} ₀	19.3 ^{+0.3} ₀	40	BH	40	12 ^{+0.043} ₀	43.3 ^{+0.3} ₀	17	BJ	17	5 ± 0.0150	19.3 ^{+0.3} ₀	40	BJ	40	12 ± 0.0215	43.3 ^{+0.3} ₀
18	BH	18	6 ^{+0.030} ₀	20.8 ^{+0.3} ₀	42	BH	42	12 ^{+0.043} ₀	45.3 ^{+0.3} ₀	18	BJ	18	6 ± 0.0150	20.8 ^{+0.3} ₀	42	BJ	42	12 ± 0.0215	45.3 ^{+0.3} ₀
19	BH	19	6 ^{+0.030} ₀	21.8 ^{+0.3} ₀	45	BH	45	14 ^{+0.043} ₀	48.8 ^{+0.3} ₀	19	BJ	19	6 ± 0.0150	21.8 ^{+0.3} ₀	45	BJ	45	14 ± 0.0215	48.8 ^{+0.3} ₀

• We can also handle standards not listed above. Please contact Miki Pulley.

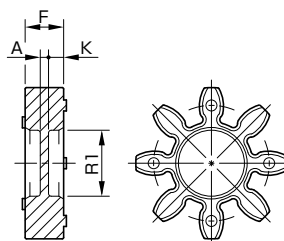
■ Dimensions Spider



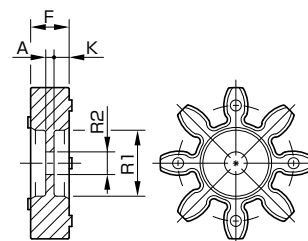
ALS-014 ~ 030-R-EL



ALS-040-R-EL



ALS-055 ~ 065-R-EL



ALS-080 ~ 105-R-EL

Model	F (mm)	R1 (mm)	R2 (mm)	K (mm)	A (mm)
ALS-014-R-EL	6.2	3.5	–	2.5	1.2
ALS-020-R-EL	8.2	6.2	–	3.4	1.4
ALS-030-R-EL	10.2	8.5	–	4	2.2
ALS-040-R-EL	12	18	–	4.5	3
ALS-055-R-EL	14	24	–	5.5	3
ALS-065-R-EL	15	30	–	5.5	4
ALS-080-R-EL	18	37	15	7	4
ALS-095-R-EL	20	43	20	8	4
ALS-105-R-EL	21	50	20	8.5	4

How to Place an Order

ALS-055-R-EL

Size

Element only

Element type

R: Hardness 97 JIS A; Tight-fit type

Material: Polyurethane elastomer

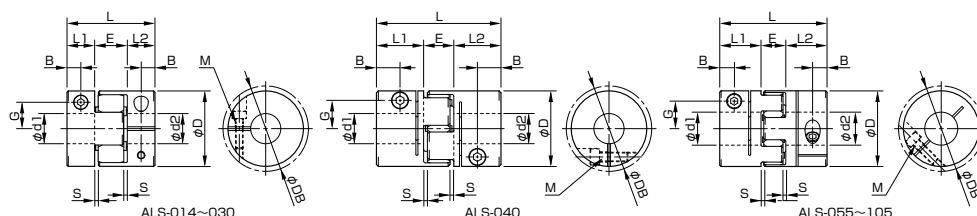
STARFLEX ALS (AYN) – Datasheet

Specifications

Model	Torque		Misalignment			Max. rotation speed [min ⁻¹]	Static torsional stiffness [N-m/rad]	Radial stiffness [N/mm]	Moment of inertia [kg-m ²]	Mass [kg]
	Nominal [N-m]	Max. [N-m]	Parallel [mm]	Angular [°]	Axial [mm]					
ALS-014Y	(1.2)	(2.4)	0.10	1	0 ~ +0.6	10000	12	200	1.98×10^{-7}	0.007
ALS-020Y	(3)	(6)	0.15	1	0 ~ +0.8	10000	24	210	1.09×10^{-6}	0.019
ALS-030Y	(7.5)	(15)	0.15	1	0 ~ +1.0	10000	73	330	6.19×10^{-6}	0.045
ALS-040Y	(10)	(20)	0.10	1	0 ~ +1.2	10000	760	940	4.01×10^{-5}	0.16
ALS-055Y	(35)	(70)	0.15	1	0 ~ +1.4	7000	1400	1160	1.63×10^{-4}	0.34
ALS-065Y	(95)	(190)	0.15	1	0 ~ +1.5	5900	2100	1200	3.69×10^{-4}	0.54
ALS-080Y	(190)	(380)	0.15	1	0 ~ +1.8	4800	4000	1430	1.04×10^{-3}	1.00
ALS-095Y	(265)	(530)	0.15	1	-0.5 ~ +2.0	4000	6000	2400	2.25×10^{-3}	1.50
ALS-105Y	(310)	(620)	0.20	1	-0.9 ~ +2.0	3700	7000	4000	3.75×10^{-3}	2.05

- Check the Standard Bore Diameter and Rated Transmission Torque list as there may be limitations on the nominal and max. torque caused by the holding power of the coupling shaft section.
- Axial displacement is not allowed in the negative direction.
- Higher rpm possible with balancing.
- Stiffness values given are from measurements taken at 20 °C.
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Model	d1 • d2		D	DB	L	L1 • L2	E	S	B	G	M Quantity – Nominal dia.	Tightening torque [N-m]
	Min.	Max.										
ALS-014Y	3	7	14	16.4	22	7	8	1	3.5	5	1-M2	0.4
ALS-020Y	4	10	20	21.7	30	10	10	1	5.	7.5	1-M2.5	1
ALS-030Y	6	16	30	30	35	11	13	1.5	5.5	10.5	1-M3	1.5
ALS-040Y	8	24	40	47 (45.1)	66	25	16	2	8 (6.5)	15	1-M6 (1-M5)	14 (7)
ALS-055Y	10	30	55	56	78	30	18	2	8	20.5	1-M6	14
ALS-065Y	14	38	65	70.7	90	35	20	2.5	11.5	25	1-M8	30
ALS-080Y	19	45	80	80	114	45	24	3	11.5	30	1-M8	30
ALS-095Y	20	55	95	98.5	126	50	26	3	12.5	37	1-M10	68
ALS-105Y	25	60	105	105	140	56	28	3.5	12.5	40	1-M10	68

- The ϕDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
- The nominal diameter for the clamping bolt M is equal to the quantity – the nominal diameter of the screw threads, where the quantity is for a hub on one side.
- The values in () in the above table are for ALS-040 hole diameters $\phi 22$ and $\phi 24$, ϕDB : 45.1 mm, B: 6.5 mm, M: 1-M5, clamping bolt tightening torque: 7 N-m.

Standard bore diameter and rated transmission torque

Unit [mm]																																		
Model	Torque	Standard bore diameter d1, d2 [mm] and rated transmission torque [N·m]																																
		3	4	5	6	6.35	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	56	60	
ALS-014Y	Nominal	0.5	0.9	1.2	1.2	1.2	1.2																											
	Max.	0.5	0.9	1.3	1.5	1.7	1.9																											
ALS-020Y	Nominal		2.1	2.2	2.7	2.7	3.0	3.0	3.0																									
	Max.		2.1	2.2	2.7	2.7	3.0	3.5	4.5																									
ALS-030Y	Nominal				3.6	3.6	4.1	4.9	7.0	7.5	7.5	7.5	7.5																					
	Max.				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																				
ALS-040Y	Nominal							10	10	10	10	10	10	10	10	10	10	10																
	Max.							20	20	20	20	20	20	20	20	20	20	20																
ALS-055Y	Nominal								34	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35									
	Max.								34	38	41	49	53	57	65	69	70	70	70	70	70	70	70											
ALS-065Y	Nominal										54	61	68	82	89	95	95	95	95	95	95	95	95	95	95	95								
	Max.										54	61	68	82	89	96	109	123	130	151	165	179	190	190										
ALS-080Y	Nominal															105	111	124	137	143	162	175	188	190	190	190	190	190						
	Max.															105	111	124	137	143	162	175	188	207	226	238	251	270						
ALS-095Y	Nominal																215	265	265	265	265	265	265	265	265	265	265	265	265	265	265			
	Max.																215	295	365	400	506	530	530	530	530	530	530	530	530	530	530	530		
ALS-105Y	Nominal																			310	310	310	310	310	310	310	310	310	310	310	310	310	310	
	Max.																			590	620	620	620	620	620	620	620	620	620	620	620	620	620	

- Bore diameters whose fields contain numbers are supported as the standard bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated transmission torque by the holding power of the shaft connection component. The numbers indicate the rated transmission torque value [N·m].
- The recommended processing tolerance for paired mounting shafts is the h7 (HA) class. However, for a shaft diameter of ø35, the tolerance is ± 0.010 .
- Bore diameters between the minimum and maximums shown in the dimensions table are compatible, but bore diameters other than those shown in the above table require other arrangements. Contact Miki Pulley for details.

How to Place an Order

ALS-055-Y-24BH-28BJ

Size ————
 Element type ————
 Y: Hardness, 90 JIS A
 Tight-fit type

Bore dia. d2 (Large dia.)
 B: h7
 BH: h7, Class H9 with keyway
 BJ: h7, Class Js9 with keyway

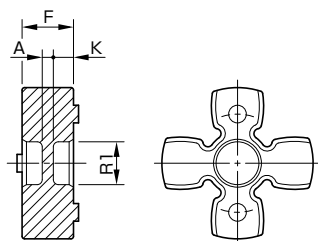
Bore dia. d1 (Small dia.)
 B: h7
 BH: h7, Class H9 with keyway
 BJ: h7, Class Js9 with keyway

Keyway Standards

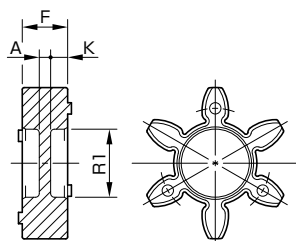
H9 keyway										JS9 keyway									
Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.		Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]
Shaft diameter	Shaft tolerance				Shaft diameter	Shaft tolerance				Shaft diameter	Shaft tolerance								
	h7					h7					h7					h7			
8	BH	8	2 ^{+0.025} ₀	9 ^{+0.3} ₀	20	BH	20	6 ^{+0.030} ₀	22.8 ^{+0.3} ₀	8	BJ	8	2 ± 0.0125	9 ^{+0.3} ₀	20	BJ	20	6 ± 0.0150	22.8 ^{+0.3} ₀
9	BH	9	3 ^{+0.025} ₀	10.4 ^{+0.3} ₀	22	BH	22	6 ^{+0.030} ₀	24.8 ^{+0.3} ₀	9	BJ	9	3 ± 0.0125	10.4 ^{+0.3} ₀	22	BJ	22	6 ± 0.0150	24.8 ^{+0.3} ₀
10	BH	10	3 ^{+0.025} ₀	11.4 ^{+0.3} ₀	24	BH	24	8 ^{+0.036} ₀	27.3 ^{+0.3} ₀	10	BJ	10	3 ± 0.0125	11.4 ^{+0.3} ₀	24	BJ	24	8 ± 0.0180	27.3 ^{+0.3} ₀
11	BH	11	4 ^{+0.030} ₀	12.8 ^{+0.3} ₀	25	BH	25	8 ^{+0.036} ₀	28.3 ^{+0.3} ₀	11	BJ	11	4 ± 0.0150	12.8 ^{+0.3} ₀	25	BJ	25	8 ± 0.0180	28.3 ^{+0.3} ₀
12	BH	12	4 ^{+0.030} ₀	13.8 ^{+0.3} ₀	28	BH	28	8 ^{+0.036} ₀	31.3 ^{+0.3} ₀	12	BJ	12	4 ± 0.0150	13.8 ^{+0.3} ₀	28	BJ	28	8 ± 0.0180	31.3 ^{+0.3} ₀
13	BH	13	5 ^{+0.030} ₀	15.3 ^{+0.3} ₀	30	BH	30	8 ^{+0.036} ₀	33.3 ^{+0.3} ₀	13	BJ	13	5 ± 0.0150	15.3 ^{+0.3} ₀	30	BJ	30	8 ± 0.0180	33.3 ^{+0.3} ₀
14	BH	14	5 ^{+0.030} ₀	16.3 ^{+0.3} ₀	32	BH	32	10 ^{+0.036} ₀	35.3 ^{+0.3} ₀	14	BJ	14	5 ± 0.0150	16.3 ^{+0.3} ₀	32	BJ	32	10 ± 0.0180	35.3 ^{+0.3} ₀
15	BH	15	5 ^{+0.030} ₀	17.3 ^{+0.3} ₀	35	BH	35	10 ^{+0.036} ₀	38.3 ^{+0.3} ₀	15	BJ	15	5 ± 0.0150	17.3 ^{+0.3} ₀	35	BJ	35	10 ± 0.0180	38.3 ^{+0.3} ₀
16	BH	16	5 ^{+0.030} ₀	18.3 ^{+0.3} ₀	38	BH	38	10 ^{+0.036} ₀	41.3 ^{+0.3} ₀	16	BJ	16	5 ± 0.0150	18.3 ^{+0.3} ₀	38	BJ	38	10 ± 0.0180	41.3 ^{+0.3} ₀
17	BH	17	5 ^{+0.030} ₀	19.3 ^{+0.3} ₀	40	BH	40	12 ^{+0.043} ₀	43.3 ^{+0.3} ₀	17	BJ	17	5 ± 0.0150	19.3 ^{+0.3} ₀	40	BJ	40	12 ± 0.0215	43.3 ^{+0.3} ₀
18	BH	18	6 ^{+0.030} ₀	20.8 ^{+0.3} ₀	42	BH	42	12 ^{+0.043} ₀	45.3 ^{+0.3} ₀	18	BJ	18	6 ± 0.0150	20.8 ^{+0.3} ₀	42	BJ	42	12 ± 0.0215	45.3 ^{+0.3} ₀
19	BH	19	6 ^{+0.030} ₀	21.8 ^{+0.3} ₀	45	BH	45	14 ^{+0.043} ₀	48.8 ^{+0.3} ₀	19	BJ	19	6 ± 0.0150	21.8 ^{+0.3} ₀	45	BJ	45	14 ± 0.0215	48.8 ^{+0.3} ₀

• We can also handle standards not listed above. Please contact Miki Pulley.

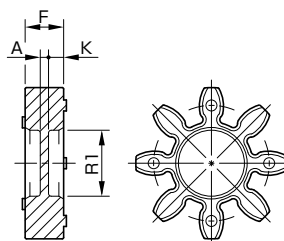
■ Dimensions Spider



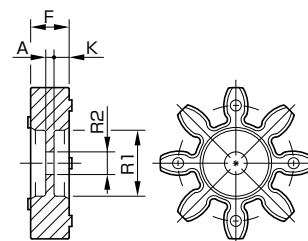
ALS-014 ~ 030-Y-EL



ALS-040-Y-EL



ALS-055 ~ 065-Y-EL



ALS-080 ~ 105-Y-EL

Model	F (mm)	R1 (mm)	R2 (mm)	K (mm)	A (mm)
ALS-014-Y-EL	6.2	3.5	–	2.5	1.2
ALS-020-Y-EL	8.2	6.2	–	3.4	1.4
ALS-030-Y-EL	10.2	8.5	–	4	2.2
ALS-040-Y-EL	12	18	–	4.5	3
ALS-055-Y-EL	14	24	–	5.5	3
ALS-065-Y-EL	15	30	–	5.5	4
ALS-080-Y-EL	18	37	15	7	4
ALS-095-Y-EL	20	43	20	8	4
ALS-105-Y-EL	21	50	20	8.5	4

How to Place an Order

ALS-055-Y-EL

Size ——— Element only
 ——— Element type
 Y: Hardness 90 JIS A; Tight-fit type
 Material: Polyurethane elastomer